

CLAIMS

1. A component-mounting apparatus comprising:
holding means that holds a component and moves horizontally; and
positioning means having a sloped portion for positioning the component held by the holding means when the component comes into contact with the sloped portion.
2. The component-mounting apparatus according to Claim 1, wherein
the positioning means comprises a first rotatable roller member having a sloped side surface with which the component comes into contact; and
the horizontal movement speed of the holding means substantially agrees with the horizontal component of the peripheral velocity of the first roller member, with which the component comes into contact.
3. The component-mounting apparatus according to Claim 1, wherein the positioning means comprises a first rotatable roller member having a sloped side surface with which the component comes into contact and an auxiliary roller member rotatably disposed opposite the first roller member and having a sloped side surface with which the component comes into contact.
4. The component-mounting apparatus according to Claim 3, wherein the horizontal movement speed of the holding means

substantially agrees with the horizontal component of the peripheral velocity of the first roller member and/or the auxiliary roller member, with which the component comes into contact.

5. The component-mounting apparatus according to any one of Claims 2 to 4, wherein the first roller member and/or the auxiliary roller member has a first rotating shaft extending in a direction substantially perpendicular to the horizontal movement direction of the holding means.

6. The component-mounting apparatus according to Claim 5, wherein the first roller member and the auxiliary roller member share the single first rotating shaft.

7. The component-mounting apparatus according to any one of Claims 2 to 6, further comprising control means for controlling the holding means and/or the first rotating shaft,

wherein the control unit controls at least either the holding means or the first rotating shaft so as to satisfy the following equation:

$$V = 2\pi AN$$

wherein V is the horizontal movement speed of the holding means; N is the number of revolutions of the first roller member and/or the auxiliary roller member; and A is the distance from the center of rotation of the first roller member and/or the auxiliary roller member to the conveying

line of the holding means.

8. The component-mounting apparatus according to any one of Claims 2 to 7, wherein

a plurality of the first roller members and/or a plurality of the auxiliary roller members are arranged in the movement direction of the holding means; and

the holding means has a rotating portion that rotates with the component held about an axis substantially perpendicular to the movement direction of the holding means.

9. The component-mounting apparatus according to any one of Claims 2 to 8, further comprising applying means for applying a paste material to the component, the applying means being disposed downstream of the first roller member and/or the auxiliary roller member in the movement direction of the component.

10. The component-mounting apparatus according to Claim 9, wherein

the applying means comprises a second rotatable roller member having a circumferential surface provided with the paste material to apply the paste material to the component when the component comes into contact with the circumferential surface; and

the horizontal movement speed of the holding means substantially agrees with the horizontal component of the peripheral velocity of the second roller member, with which

the component comes into contact.

11. The component-mounting apparatus according to Claim 10, wherein the second roller member has a second rotating shaft extending in a direction substantially perpendicular to the horizontal movement direction of the holding means.

12. A component-positioning unit for positioning a moving component, comprising:

a rotatable rotating shaft; and

a sloped side surface disposed at an end of the rotating shaft to position the moving component in the axial direction of the rotating shaft when the component comes into contact with the sloped side surface.